## WHAT IS CLAIMED IS

- 1. A supporting disk for a surface grinding wheel, comprising a glass-fiber reinforced phenolic resin body, which includes
- one of an upper covering layer (6) of a textile glass fabric (9) and a glassyarn layer (10); an intermediate layer (7) of a fiber mat (14); and one of a lower covering layer (8) of a textile glass fabric (9) and a glassyarn layer (10).

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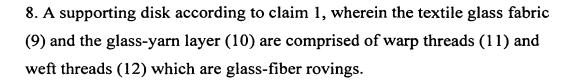
- 2. A supporting disk according to claim 1, wherein the intermediate layer (7) is a fiber fleece.
- 3. A supporting disk according to claim 1, wherein the intermediate layer(7) is a fabric of a volume enlarged by needling.
  - 4. A supporting disk according to claim 1, wherein the intermediate layer(7) is comprised of natural fibers.
- 5. A supporting disk according to claim 1, wherein the intermediate layer(7) is comprised of synthetic organic fibers.
  - 6. A supporting disk according to claim 1, wherein the intermediate layer (7) is comprised of textile glass fibers.

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7. A supporting disk according to claim 1, wherein the upper covering layer (6), the intermediate layer (7) and the lower covering layer (8) are sewn together.

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- 5 9. A supporting disk according to claim 1, wherein the intermediate layer (7) is thicker than the upper covering layer (6) and the lower covering layer (8).
- 10. A supporting disk according to claim 1, wherein the upper covering layer (6) and the lower covering layer (8) have a higher tensile strength 10 than the intermediate layer (7).
  - 11. A surface grinding wheel comprising a supporting disk (1) and abrasive faminas (2) fixed to the supporting disk (1), the supporting disk (1) com-
- prising a glass-fiber reinforced phenolic resin body, which includes one of an upper covering layer (6) of a textile glass fabric (9) and a glassyarn layer (10);

an intermediate layer (7) of a fiber mat (14); and

- 20 one of a lower covering layer (8) of a textile glass fabric (9) and a glassyarn layer (10).
  - 12. A surface grinding wheel according to claim 11, wherein the intermediate layer (7) is a fiber fleece.
  - 13. A surface grinding wheel according to claim 11, wherein the intermediate layer (7) is a fabric of a volume enlarged by needling.

- 14. A surface grinding wheel according to claim 11, wherein the intermediate layer (7) is comprised of natural fibers.
- 15. A surface grinding wheel according to claim 11, wherein the intermediate layer (7) is comprised of synthetic organic fibers.
  - 16. A surface grinding wheel according to claim 11, wherein the intermediate layer (7) is comprised of textile glass fibers.
- 17. A surface grinding wheel according to claim 11, wherein the upper covering layer (6), the intermediate layer (7) and the lower covering layer (8) are sewn together.
- 18. A surface grinding wheel according to claim 11, wherein the textile
  15 glass fabric (9) and the glass-yarn layer (10) are comprised of warp threads
  (11) and weft threads (12) which are glass-fiber rovings.
  - 19. A surface grinding wheel according to claim 11, wherein the intermediate layer (7) is thicker than the upper covering layer (6) and the lower covering layer (8).
    - 20. A surface grinding wheel according to claim 11, wherein the upper covering layer (6) and the lower covering layer (8) have a higher tensile strength than the intermediate layer (7).

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